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## WHAT IS CLAIMED IS:

20 Al 11,	A method for monitoring and controlling quality of a paper web bei	ing
manufacti	ured in a paper machine, comprising:	

conveying the paper web from an exit of the paper machine and subjecting the paper web to a treatment process;

imaging the paper web with a thermal camera on a continual basis in order to detect defects in the paper web; and

adjusting at least one of the manufacturing process and the treatment process for the paper web based on the detected defects.

- 2. The method of claim 1, wherein the step of subjecting the paper web to a treatment process comprises coating the paper web with a coating material.
- 3. The method of claim 1, wherein the step of subjecting the paper web to a treatment process comprises calendering the paper web.
- 4. The method of claim 2, wherein the paper web is imaged prior to the treatment process.
- 5. The method of claim 2, wherein the paper web is imaged after the treatment process.
- 6. The method of claim 2, wherein the paper web is imaged both prior to and after the treatment process.
- 7. The method of claim 3, wherein the paper web is imaged prior to the treatment process.
- 8. The method of claim 3, wherein the paper web is imaged after the treatment process.
- 9. The method of claim 3, wherein the paper web is imaged both prior to and after the treatment process.

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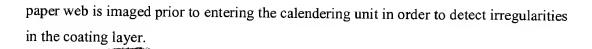
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- 10. The method of claim 1, wherein the thermal camera images the paper web substantially continuously.
- 11. The method of claim 10, wherein a video camera is used to image the paper web substantially continuously.
- 12. The method of claim 1, wherein the thermal camera images the paper web at periodic intervals of time
- 13. The method of claim 12, wherein still images of the paper web are taken at periodic intervals.
- 14. The method of claim 1, wherein images of the paper web taken by the thermal camera are used in order to detect nonuniformities in a characteristic of the paper web.
- 15. The method of claim 14, wherein the images are used to detect nonuniformities in wetness of the paper web.
- 16. The method of claim 14, wherein the images are taken after the paper web is coated with a coating layer, and the images are used to detect nonuniformities in the coating layer.
- 17. The method of claim 1, wherein the imaging is performed within the infrared light spectrum of 3 to 12 micrometers in wavelength.
- 18. The method of claim 1, wherein the imaging is performed within the infrared light spectrum of 3 to 5 micrometers in wavelength.
- 19. The method of claim 1, wherein the imaging is performed within the infrared light spectrum of 8 to 12 micrometers in wavelength.
- 20. The method of claim 1, wherein the web is conveyed to a coating unit in which a coating layer is applied to the paper web, and the coated paper web is then conveyed to a calendering unit in which the web is calendered, and wherein the coated



- 21. The method of claim 1, wherein images of the paper web taken with the thermal camera are displayed on a monitor to enable continuous monitoring during manufacturing and treatment of the paper web.
- 22. The method of claim 1, wherein an image of the paper web taken with the thermal camera is stored in a memory for further analysis.

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